# **Chapter 2**

# **CERVICAL DISC HERNIA**

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#### INTRODUCTION

Cervical disc diseases, with an incidence rate of 36%, are the second most common disc pathologies after lumbar disc diseases. They lead to less disabilities than lumbar disc pathologies and do not cause as much labor loss. [1,2]

#### EPIDEMIOLOGY AND RISK FACTORS

Neck pain is the main complaint of cervical pathologies (3,4). The incidence has been determined as 12% in the female population and 9% in the male population (5,6,7). In patients with neck pain, the frequency of complaints related to nerve root or cord compression is below 3%. (8)

Risk factors include being female in the workplace, physical inactivity, age, working in sitting position, performing repetitive movements, posture in the forward flexion of the neck for a long time and working with the computer. In addition, environmental factors such as dry air and temperature changes have also been identified as risk factors for neck pain. (9)

## ANATOMY AND PHYSIOPATHOLOGY:

The cervical spine has a wide range of motions. There are eight moving segments from occiput to T1. The first intervertebral disc

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## **Surgical Treatment:**

Surgical treatment of CDH is performed in cases where there is no response to conservative treatment, in the presence of neurological deficits and in patients with signs of myelopathy.

The aim of surgical treatment is to provide decompression by removing the herniated disc and if any, osteophytic bone compression. Anterior cervical discectomy was first defined by Cloward, Smith and Robinson in 1958, with which they performed fusion by placing bone grafts to the discharged distance by cervical discectomy (37,38). Hirsch, on the other hand, published only patients, on whom he performed discectomy and stated in 1964 that bone fusion was not necessary for all cervical disc diseases (39). There has not been much change in terms of surgical technique since then. Implants and fusion materials used are developing and changing. In addition, surgical microscope has become available for cervical discectomy. Today, the use of artificial disc prostheses that protect movement is increasing day by day in cervical disc disease surgery.

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### Neurology and Neurosurgery II

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#### Neurology and Neurosurgery II

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